

# Instrumental Enrichment: Cognitive Functions

## I. Gathering all the information we need (Input)

1. Using our senses (listening, seeing, smelling, tasting, touching, feeling) to gather clear and complete information (clear perception).
2. Using a system or plan so that we do not skip or miss something important or repeat ourselves (systematic exploration).
3. Giving the thing we gather through our senses and our experience a name so that we can remember it more clearly and talk about it (labeling).
4. Describing things and events in terms of where and when they occur (temporal and spatial referents).
5. Deciding on the characteristics of a thing or event that always stay the same, even when changes take place (conservation, constancy, and object permanence).
6. Organizing the information we gather by considering more than one thing at a time (using two sources of information).
7. Being precise and accurate when it matters (need for precision).

## II. Using the information we have gathered (Elaboration)

1. Defining what the problem is, what we are being asked to do, and what we must figure out (analyzing disequilibrium).
2. Using only that part of the information we have gathered that is relevant, that is, that applies, to the problem and ignoring the rest (relevance).
3. Having a good picture in our mind of what we are looking for, or what we must do (internalization).
4. Making a plan that will include the steps we need to take to reach our goal (planning behavior).
5. Remembering and keeping in mind the various pieces of information we need (broadening our mental field).
6. Looking for the relationship by which separate objects, events, and experiences can be tied together (projecting relationships).
7. Comparing objects and experiences to others to see what is similar and what is different (comparative behavior).
8. Finding the class or set to which the new object or experience belongs (categorization).
9. Thinking about different possibilities and figuring out what would happen if you were to choose one or another (hypothetical thinking).
10. Using logic to prove things and to defend your opinion (logical evidence).

## III. Expressing the solution to a problem (Output)

1. Being clear and precise in your language to be sure that there is no question as to what your answer is. Put yourself into the "shoes" of the listener to be sure that your answer will be understood (overcoming egocentric communication).
2. Think things through before you answer instead of immediately trying to answer and making a mistake, and then trying again (overcoming trial-and-error).
3. Count to ten (at least) so that you don't say or do something you will be sorry for later (restraining impulsive behavior).
4. If you can't answer a question for some reason even though you "know" the answer, don't fret or panic. Leave the question for a little while and then, when you return to it, use a strategy to help you find the answer (overcoming blocking).